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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,619	08/31/2006	Shoji Hayakawa	VX052694 PCT	6295
23400 7590 08/09/2007 POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			EXAMINER HEWITT, JAMES M	
			ART UNIT 3679	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,619

Applicant(s)

HAYAKAWA, SHOJI

Examiner

James M. Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 4 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/6/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

The amendment to the specification filed on 10/6/05 does not comply with the requirements of 37 CFR 1.121 because it uses single brackets to indicate deleted text. Amendments to the specification filed on or after July 30, 2003 must comply with 37 CFR 1.121.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Application Data Sheet

The application data sheet is defective for the following reasons:

On page 1, the application type is incorrectly identified as "PCT".

The filing date of the international application is incorrectly indicated as December 23, 2003.

Appropriate correction is required.

Drawings

The drawings are objected to because in Figs. 1-3, the coating on the metal tube (1) should be made readily evident, and should have cross-hatching corresponding to plastic (see MPEP 608.02 (IX)); also it should be made clear that portion of the tube (1) that is bare, with the coating removed. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the beads contacting

the inner surface of a conductive plastic tube must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because on line 1, the phrase "The object is to provide" constitutes an implied phrase. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities:

On line 2 of "Background Art", the term "breaks" is incorrect. It appears that the term should be "brakes".

On line 5 of the paragraph beginning at page 2, line 16, the term "surfaced" is incorrect. It appears that the term should be "surface(s)".

On lines 6-7 of the paragraph beginning at page 2, line 16, the phrase "and the plastic film is removed so that the circumferential surfaced of the bare metal pipe is exposed by exposing...than the exposed region" mischaracterizes the invention.

On lines 17-18 of the paragraphs beginning at page 2, line 16, it is unclear as to what is meant by the phrase "at a position nearer to the conductive plastic tube than the exposed region".

Appropriate correction is required.

Claim Objections

Claims 1 and 3-4 are objected to because of the following informalities:

Claims 1 and 4 are objected to under 37 CFR 1.75(i), which states "Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation."

In claim 1, line 2, "the end" lacks proper antecedent basis. A suggestion to obviate this objection would be to replace "the end" with "an end".

In claim 1, line 3, "tube" should be replaced with "pipe" for clarity.

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In claim 1, line 5, "the circumferential surface" should be replaced with "circumferential surfaces" for clarity.

In claim 1, line 6, "exposed portion is" should be replaced with "exposed portions are" for clarity.

In claim 1, line 9, the first instance of "tube" should be replaced with "pipe" for clarity.

In claim 3, line 2, "the bead" lacks proper antecedent basis. A suggestion to obviate this objection would be to replace "the bead is" with "the beads are".

In claim 4, line 2, "the end" lacks proper antecedent basis. A suggestion to obviate this objection would be to replace "the end" with "an end".

In claim 4, line 2, "tube" should be replaced with "pipe" for clarity.

In claim 4, line 5, "the circumferential surface" should be replaced with "circumferential surfaces" for clarity.

In claim 4, lines 5-6, "exposed portion is" should be replaced with "exposed portions are" for clarity.

In claim 4, line 6, "plastic" should be inserted after "conductive". Note line 7.

In claim 4, line 7, the second instance of "tube" should be replaced with "pipe" for clarity.

In claim 4, line 9, the first instance of "tube" should be replaced with "pipe" for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 6-9, the phrase "the exposed portion is made to contact the inner surface of a conductive plastic tube, *by disposing a seal member at a position nearer to the conductive plastic tube than the exposed region, thus connecting the plastic coated metal tube and the conductive tube*" is unclear and seems to mischaracterize the invention. Disposition of the seal causes the exposed portion to contact the inner surface of the plastic tube and connect the plastic tube to the conductive tube? What is meant by the phrase "disposing a seal member at a position *nearer to the conductive plastic tube than the exposed region*?"

In claim 4, line 8, what is meant by the phrase "fusing to each other the conductive plastic tube and the plastic coated metal tube at a position *nearer to the plastic tube than the exposed region*"?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (JP 2003-206818).

With respect to claim 1, Matsumoto et al discloses a pipe connecting structure wherein beads (11, Fig. 4) are provided to protrude from the outer surface of the end of a plastic coated metal tube (4/10) obtained by coating the outside of a bare metal pipe with a nonconductive plastic film, the plastic film is removed only at a from the tip of a bead to expose the circumferential surface of the bare metal pipe, the exposed portion is made to contact the inner surface of a tube (14), by disposing a seal member (13) at a position nearer to the tube than the exposed region, thus connecting the plastic coated metal tube and the conductive tube. Matsumoto does not show that the film on each of the beads is removed to expose the metal pipe, and rather only shows that the film on one of the beads is removed. Nevertheless, it would have been an obvious matter of design choice to remove the film on each of the beads since Applicant has not disclosed that doing so is significant and it appears that removing the film on one of the beads does not affect performance of the device. Matsumoto et al does not disclose that tube (14) is conductive plastic. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make Matsumoto et al's tube from a conductive plastic since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Also note lines 9-11 of page 3 of Applicant's specification.

With respect to claim 3, wherein the bead is formed along the whole circumference of the plastic coated metal tube.

Claim 4, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (JP 2003-206818) in view of Baker (US 3,363,680).

With respect to claim 4, Matsumoto et al discloses a pipe connecting structure wherein beads (11, Fig. 4) are provided to protrude from the outer surface of the end of a plastic coated metal tube (4/10) obtained by coating the outside of a bare metal pipe with a nonconductive plastic film, the plastic film is removed only from the tip of a bead to expose the circumferential surface of the bare metal pipe, the exposed portion is made to contact the inner surface of a tube (14). Matsumoto does not show that the film on each of the beads is removed to expose the metal pipe, and rather only shows that the film on one of the beads is removed. Nevertheless, it would have been an obvious matter of design choice to remove the film on each of the beads since Applicant has not disclosed that doing so is significant and it appears that removing the film on one of the beads does not affect performance of the device. Matsumoto et al does not disclose that tube (14) is conductive plastic. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make Matsumoto et al's tube from a conductive plastic since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Also note lines 9-11 of page 3 of Applicant's specification. Matsumoto also fails to teach that the plastic coated

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metal tube and the plastic conductive tube are connected by being fused at a position nearer to the conductive plastic tube than the exposed region. Baker teaches fusing two plastic coupling elements (61 and 30). Accordingly, in view of Baker's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Matsumoto et al and connect the tubes by fusion as taught by Baker in order to securely and reliably connect the tubes together.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
8/3/07


JAMES M. HEWITT
PRIMARY EXAMINER